

NCPTT NOTES

National Center for Preservation Technology and Training

UNITED STATES DEPARTMENT OF THE INTERIOR • NATIONAL PARK SERVICE

SPRING
SUPPLEMENT

1999

NUMBER 31

Preservation Technology and Training Publications: 1994-1999 in review

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2
Digital
Resources

4
Print
Resources

10
Video
Resources

11
NCPTT
Newsletters

NCPTT NOTES

SPRING SUPPLEMENT

1999

NUMBER 31

PTTPublications
No. 1999-09

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PTTPublications

Digital Resources

D-17. Models and Images for Development of Nonlinear Documentation Strategies for Incorporating Computerized Solid Modeling in Historical Building Survey

CD-ROM. Texas A&M University. 1999

PTTPublications No. 1999-05

This CD contains the electronic models created from investigations and data using solid modeling techniques to document existing conditions of historic buildings. This CD supplements a report on the same topic; see item P-52 below.

This CD resulted from a 1997 Preservation Technology and Training Grants award.

D-16. The Conservation and Preservation of Tabby

Proceedings on Web site <www.ganet.org/dnr/histpres>. Georgia State Historic Preservation Office. 1998

PTTPublications No. 1998-37

The state of scholarship in the field of tabby and the identification of research needs for the preservation of tabby resources was the goal of this symposium held at Jekyll Island, Georgia, on this historic masonry material.

This conference publication resulted from a 1997 PTTGrants award. See page 7 in *NCPTT Notes 25* for a review of the symposium.

D-15. EDIFIS

CD-ROM. Texas A&M University. 1998

PTTPublications No. 1998-32

This CD contains the methodology and computer database design for documenting large groups of similar historic structures, such as the test-case courthouse documentation used in developing this methodology.

This CD resulted from a 1996 PTTGrants award.

D-14. Partners in Prosperity

Booklet on Web site <www.state.nj.us/dep/njht/features.htm#impactstudy>. New Jersey Historic Trust. 1998

PTTPublications No. 1998-25

This booklet summarizes the findings of a study (see item D-6 below) of historic preservation's impacts on New Jersey's local and statewide economies.

This publication resulted from a 1995 PTTGrants award. See item 20 in *NCPTT Notes 28* for a project description and other publications that resulted from this project. Also see page 6 in *NCPTT Notes 29* for further NCPTT work on this topic.

D-13. Computerizing Maryland's Historic Site Records

Web site <www.ari.net/mdshpo/gisncptt.html>. Maryland State Historic Preservation Office. 1998
PTTPublications No. 1998-21

This project assisted the conversion of Maryland's Inventory of Historic Properties data into digital format in order to integrate historic properties information into a Geographic Information System.

This database resulted from a 1996 PTTGrants award.

D-12. Mechanical Systems in Historic Buildings

CD-ROM. Belmont Technical College. 1998

PTTPublications No. 1998-20

This CD is the interactive complement to a pilot distance learning course on mechanical systems in historic buildings.

This CD resulted from a 1996 PTTGrants award. See page 3 in *NCPTT Notes 29* for a review of the project.

D-11. State Historic Preservation Legislation Database

Web site <www.ncsl.org/programs/arts/statehist_intro.htm>. National Conference of State Historic Preservation Officers and National Conference of State Legislatures. 1998.

PTTPublications No. 1998-13

Organized by state, this database contains a comprehensive listing and narrative summaries for all state legislation or state constitutional articles that contain specific references to historic properties, archeological sites or culturally significant unmarked human burials. Also included are citations from the legislative codebooks from the fifty states, the District of Columbia, American Samoa, Guam, Puerto Rico, and the Virgin Islands. See item P-39 below for a report on the purpose and development of the database.

This database resulted from a 1996 PTTGrants award to the National Conferences of State Historic Preservation Officers.

D-10. Providing Public Access to Hawai'i's Preservation Information via World Wide Web

Web site <mano.icsd.hawaii.gov/~ckmoek>. Hawai'i State Historic Preservation Office. 1998

PTTPublications No. 1998-12

This experimental database server allows searches of the Hawai'i SHPO library and provides links to GIS views of selected islands.

This database resulted from a 1996 PTTGrants award.

D-9. Standardization in Historical Information and Interpretation System

Web site <www.zone-2.com/namc/shiipsInfo.html>. Ohio State Historic Preservation Office and North American Maritime Consortium, Inc. 1998

PTTPublications No. 1998-10

This prototype database is a demonstration project for an expandable, relational and searchable database of Ohio's Lake Erie maritime cultural resources. See item P-37 below for a related user manual and final project report.

This database resulted from a 1996 PTTGrants award to the Ohio State Historic Preservation Office.

D-8. Camp Ruston

Web site <www.library.latech.edu/campruston>. Camp Ruston Foundation. 1997

PTTPublications No. 1997-28

This project developed an electronic multimedia exhibit on Camp Ruston, one of the largest World War II prisoner of war camps in the United States.

This project was completed under contract between the Camp Ruston Foundation, Inc., and NCPTT. See item 141 in *NCPTT Notes 28* for other publications that resulted from this project.

D-7. Louisiana Heritage InfoNet

Web site <www.lhin.lsu.edu>. Louisiana State University Office of Community Preservation. 1997

PTTPublications No. 1997-23

Louisiana Heritage InfoNet is a model Internet resource for gathering, managing and disseminating information on a state's or region's natural and cultural heritage — in this instance, Louisiana. Site components include access to National Register of Historic Places listings, *Save Outdoor Sculpture!* data, Historic American Building Survey documentation, Louisiana landmarks, and disaster response information. A virtual visitor center for the Bayou Teche area also is included.

This database resulted from a 1995 PTTGrants award. See item 29 in *NCPTT Notes 28* for other publications that resulted from this project.

D-6. Economic Impacts of Historic Preservation

Report on Web site <www.state.nj.us/dep/njht/features.htm#impactstudy>. New Jersey Historic Trust. 1997

PTTPublications No. 1997-05

This report summarizes research findings on the economic effects of historic preservation in New Jersey, and discloses the statistical and analytical methodology.

This publication resulted from a 1995 PTTGrants award. See item D-14 above for a related brochure, and see item 20 in *NCPTT Notes 28* for other publications that resulted from this project. Also see page 6 in *NCPTT Notes 29* for further NCPTT work on this topic.

D-5. Preserving Georgia's Historical Records

Web site <www.sos.state.ga.us/archives/ps/technical.htm>. Georgia Department of Archives and History. 1997

PTTPublications No. 1997-02

Web-based technical leaflets present basic information on six archival preservation topics: 1) disaster preparedness, 2) reformatting records, 3) selecting an off-site storage facility, 4) proper environmental conditions for records storage, 5) machine readable records, and 6) preserving paper-based records.

This publication resulted from a 1995 PTTGrants award.

D-4, 3 and 2. SHOWPIX 1.0, POREDEMO 1.0 and EDGE 1.0

Downloadable software <caldera.wr.usgs.gov/OF98-248/index.html>. US Geological Survey. 1995

PTTPublications Nos. 1995-05, 04 and 03

Three DOS software programs are available online for use in fractal analysis of scanning electron microscope and electron microprobe images of pore profiles exposed in cross-section. Programs in the set allow image calibration, display and statistical analysis of the computed dimensions for highly complex porous materials. A preview of a MORPH-II program for SEM image analysis for fractal dimensions of exposed surfaces also is available at this Web site.

The software programs were completed under contract between US Geological Survey and NCPTT.

D-1. A Simple Book Repair Manual

Web site <www.dartmouth.edu/~preserve/tofc.html>. Dartmouth College-Baker Library Preservation Committee. 1995

PTTPublications No. 1995-02

This publication is the Web version of Baker Library's book repair training manual. *A Simple Book Repair Manual* explains book conservation procedures such as cleaning, repairing and tightening hinges, binding a single signature, and drying wet books. Also discussed are guiding principles of book repair, essential items for a book repair tool kit and book anatomy.

This Web publication resulted from a 1995 PTTGrants award. See item P-30 below for another PTTPublication on this topic.

PTTPublications

Print Resources

P-54. Advancing State Historic Preservation Office Geographic Information Systems in the Western United States

Report (18 pp; appendices). New Mexico State Historic Preservation Office. 1999

PTTPublications No. 1999-08

This report documents implementing Geographic Information Systems technology by State Historic Preservation Offices in large, transaction-heavy Cultural Resource Information Systems in the western United States. The project focused on pooling CRIS resources from several agencies, including Tribal Historic Preservation Offices, historical societies, universities and museums.

This publication resulted from a 1997 PTTGrants award.

P-53. Coordinate Measurement of Ships and Smallcraft

Report (iv, 94 pp; illustrated). Mystic Seaport Museum, Inc. 1999

PTTPublications No. 1999-06

In this manual, the Sokkia total station is adapted from use in land surveying to maritime application, as a tool to collect three-dimensional coordinate measurement data of historic watercraft. The manual presents a systematic process that the non-surveyor operator can follow for successful vessel documentation.

This publication resulted from a 1997 PTTGrants award.

P-52. Development of Nonlinear Documentation Strategies for Incorporating Computerized Solid Modeling in Historical Building Survey

Report (23 pp). Texas A&M University. 1999

PTTPublications No. 1999-04

This report describes solid modeling as an alternative to conventional two-dimensional drawings for documenting historic structures. A related CD-ROM (see item D-17 above) contains electronic models developed during this project.

This publication resulted from a 1997 PTTGrants award.

P-51. An Evaluation of Archaeological Applications of Mapping Grade Global Positioning Systems: Field Tests in Northeastern Colorado's Plains and Mountains

Report (32 pp). University of Northern Colorado Research Corporation. 1999

PTTPublications No. 1999-03

This report describes the use of differentially corrected, submeter Global Positioning Systems in two environmental contexts – northeastern Colorado's high plains and mountains – as an alternative to conventional surveying techniques for rapid, cost-effective collection of archaeological data.

This project was completed under contract between the University of Northern Colorado Research Corporation and NCPTT.

P-50. Nondestructive Method for Hardness Evaluation of Mortars Report

(59 pp; appendices). Rocky Mountain Masonry Institute. 1999

PTTPublications No. 1999-02

This study developed two test methods to measure the hardness of masonry mortars with a pendulum hammer as a practical device for nondestructive evaluation of in-place mortars.

This publication resulted from a 1997 PTTGrants award. See page 5 in NCPTT Notes 30 for a project review.

P-49. Ground-penetrating Radar Techniques and Three-dimensional Computer Mapping in the American Southwest

Reprint from *Journal of Field Archaeology* (volume 25, number 4, pp 417-430). L.B. Conyers and C. M. Cameron, authors. Winter 1998

PTTPublications No. 1998-36

This article explains the successful imaging of buried archeological features utilizing new techniques of ground-penetrating radar acquisition and computer processing tested at sites in the southwestern United States.

This publication resulted from a 1996 PTTGrants award to the University of Colorado-Boulder. See item P-32 below for another PTTPublication on this topic, and see item 60 in *NCPTT Notes* 28 for other publications that resulted from this project. See page 4 in *NCPTT Notes* 26 for a project review.

P-48. Museum Lighting Protocol Project

Report (12 pp; appendices). Rensselaer Polytechnic Institute. 1998

PTTPublications No. 1998-31

This project examines a proposal to reduce the exposure of museum exhibits to incident radiant power without diminishing museum visitors' visual satisfaction.

This publication resulted from a 1997 PTTGrants award.

P-47. Description and Analysis of NAPAP Briquette Surface Chemistry Files

Report (32 pp). T.J. Reedy, author. 1998

PTTPublications No. 1998-30

In preparation for future statistical analysis, this project organized the data files from National Acid Precipitation Assessment Program research of limestone and marble briquettes exposed from 1984 to 1995 at several sites. The overall relationship between treatment and anion content is explained in the report. Ready-to-analyze anion and cation files are available on disk.

This project was completed under contract between Terry J. Reedy and NCPTT. See item P-14 below for another PTTPublication on this topic.

P-46. Glass and Stained Glass Conservation Workshop

Notebook (341 pp). Gerald R. Ford Conservation Center. 1998

PTTPublications No. 1998-29

This workshop notebook supplemented the July 1998 seminar on conserving and restoring flat and three-dimensional glass and stained glass objects. References and reprints useful for glass science and production technology are included in the notebook. See item V-9 below for a related video.

This publication resulted from a 1997 PTTGrants award to the Nebraska State Historic Preservation Office. See page 1 in *NCPTT Notes 29* for a review of the workshop.

P-45. Preservation Week Report: The High School for the Preservation Arts Project

Report (20 pp; appendices). New Jersey Institute of Technology. 1998

PTTPublications No. 1998-23

This report describes and assesses the pilot curriculum development phase of the High School for the Preservation Arts project — an experimental, vocational high school program devoted to teaching the preservation arts.

This project was completed under contract between the New Jersey Institute of Technology and NCPTT. See page 5 in *NCPTT Notes 26* for a review of the project.

P-44. Effect of Water on Lower Pecos River Rock Paintings in Texas

Reprint from *Rock Art Research* (volume 15, number 1, pp 12-16).

E.J. Mawk and M.W. Rowe, authors. 1998

PTTPublications No. 1998-22

This article explains the use of scanning electron microscopy to investigate physico-chemical changes that occur to rock painting surfaces following the application of water.

This publication resulted from a 1996 PTTGrants award to Texas A&M University. See items P-27 and P-26 below for other PTTPublications on this topic, and see item 58 in *NCPTT Notes 28* for other publications that resulted from this project.

P-43. HIPROTECT at Joshua Tree National Park

Report (11 pp; appendices; illustrated). University of California-Riverside. 1998

PTTPublications No. 1998-18

This report describes the installation and testing of HIPROTECT, a prototype archeological site-monitoring system designed for a desert environment, at Joshua Tree National Park where sites listed on the National Register of Historic Places are subject to trespassing, looting or vandalism.

This publication resulted from a 1995 PTTGrants award.

P-42. Analyzing the Effect of Diethylaminoethanol, an Indoor Air Pollutant, on Traditional Easel Paintings-Phase 2

Report (15 pp). Indiana University Art Museum. 1998

PTTPublications No. 1998-17

This study is based on analytical procedures developed in Phase 1 of the DEAE analysis project (see item P-41 below). The report presents infrared spectroscopic analysis of varnish and paint samples from paintings for the presence of

diethylaminoethanol, an indoor air pollutant, in an effort to analyze the effects of DEAE and conservation treatments on DEAE-contaminated paintings.

This publication resulted from a 1995 PTTGrants award.

P-41. Analyzing the Effect of Diethylaminoethanol, an Indoor Air Pollutant, on Traditional Easel Paintings-Phase 1

Report (22 pp; appendices). Indiana University Art Museum. 1998

PTTPublications No. 1998-16

This report describes analytical procedures for detecting the presence and effects of diethylaminoethanol on paintings. See item P-42 above for research findings.

This publication resulted from a 1995 PTTGrants award.

P-40. Archaeological Site Revegetation, Organochloride Based Pesticides, PCBs and their Relationship to Resource Preservation and Protection

Report (ii, 46 pp). University of Mississippi. 1998

PTTPublications No. 1998-15

This research sought to relate the levels of pesticides and PCBs at archeological sites to the sites' potential for conservation through revegetation and to the safety of field archeologists and laboratory staff. The project also evaluated the relationships between artifacts, their cultural material bearing matrix and introduced man-made chemicals.

This publication resulted from a 1995 PTTGrants award.

P-39. State Historic Preservation Legislation Database

Report (7 pp; appendices). National Conference of State Historic Preservation Officers and National Conference of State Legislatures. 1998

PTTPublications No. 1998-13

This report describes the purpose and development of the State Historic Preservation Legislation Database cited in item D-11 above.

This publication resulted from a 1996 PTTGrants award. See page 1 in *NCPTT Notes 25* for a review of the project.

P-38. Physical and Chemical Processes of Soiling and Washoff at the Cathedral of Learning

Report (42 pp; appendices). Carnegie Mellon University. 1998

PTTPublications No. 1998-11

This report summarizes a study of air pollution deposition on limestone and related damage mechanisms. The study developed information that conservators can use in determining the treatments for deteriorating limestone buildings. See items P-2 and P-10 below for other PTTPublications on this topic.

This project was completed under a cooperative agreement between Carnegie Mellon University and NCPTT. See item 119 in *NCPTT Notes 28* for other publications that resulted from this project. See page 1 in *NCPTT Notes 16* for a review of the project.

P-37. Standardization in Historical Information and Interpretation System Demonstration Project

Report and User Manual (21 pp; appendices; illustrated). Ohio State Historic Preservation Office and North American Maritime Consortium, Inc. 1998

PTTPublications No. 1998-10

This report summarizes the development and implementation of a prototype searchable Internet database, cited in item D-9 above, of Ohio's Lake Erie maritime cultural resources. The user manual documents the database structure and includes sample Web pages.

This publication resulted from a 1996 PTTGrants award to the Ohio State Historic Preservation Office.

P-36. Review of the Literature on the Topic of Acidic Deposition on Stone

Report (90 pp). United States Committee/International Council on Monuments and Sites. 1998

PTTPublications No. 1998-09

This report is an overview of the definitive literature on stone deterioration caused by acidic deposition. The material is organized into four topics: dry deposition, wet deposition, deterioration mechanisms and site studies.

This project was completed under contract between US/ICOMOS and NCPTT.

P-35. Development of a Prototypical Historic Fire Risk Index to Evaluate Fire Safety in Historic Buildings

Report (55 pp; includes 3 articles). Fire Safety Institute. 1998

PTTPublications No. 1998-08

This report explains the development of a prototype fire risk index for evaluating fire safety in historic house museums. This fire risk index includes fire prevention, emergency response and historic significance – areas not addressed explicitly by existing building codes.

This publication resulted from a 1996 PTTGrants award. See items P-22 and P-25 below for other PTTPublications on this topic, and see item 56 in *NCPTT Notes* 28 for other publications that resulted from this project.

P-34. Directory of Analytical and Materials Testing Services for Historic Preservation

Directory (40 pp). Frank Preusser and Associates, Inc. 1998

PTTPublications No. 1998-06

Designed to serve the needs of conservation professionals, this directory includes 40 laboratories that offer analytical and materials testing services. Each entry provides contact information, a brief description of equipment available and services offered, and fees charged.

This project was completed under contract between Frank Preusser and Associates, Inc. and NCPTT.

P-33. Technical Field Guide on the Health and Environmental Hazards Inherent in Architectural Restoration Materials and Processes

Manual (28 pp; illustrated). RESTORE. 1998

PTTPublications No. 1998-05

This field guide for workers in the building trades addresses environmental, health and safety issues and regulations, with particular attention to proper safety and handling methods for chemicals commonly used in building preservation.

This publication resulted from a 1996 PTTGrants award.

P-32. Finding and Mapping Buried Archaeological Features in the American Southwest

Report (50 pp; illustrated). University of Colorado. 1998

PTTPublications No. 1998-04

Ground-penetrating radar offers an efficient method of identifying subsurface archeological features without excavation; recent advances in GPR equipment and computer data processing have revolutionized the method's effectiveness. This report presents the findings of research that compared different testing methods and data processing techniques.

This publication resulted from a 1996 PTTGrants award. See item P-49 above for another PTTPublication on this topic, and see item 60 in *NCPTT Notes* 28 for other publications that resulted from this project. See page 4 in *NCPTT Notes* 26 for a review of the project.

P-31. Preservation Resource Guide for Public Works Managers

Manual (vi, 90 pp; illustrated). American Public Works Association. 1998

PTTPublications No. 1998-01

This comprehensive guide is designed to enhance public works managers' understanding of historic preservation issues, philosophy and practice. The guide includes digital and print resources pertinent to preserving historic public works.

This work resulted from a 1994 PTTGrants award.

P-30. Methodology Report for a Multimedia Approach to Training Staff in Simple Book Repair

Report (9 pp; appendices). Dartmouth College-Baker Library Preservation Committee. 1997

PTTPublications No. 1997-26

This report explains the project background and conversion of the *Simple Book Repair* training manual to an illustrated repair manual available on the Internet (see item D-1 above).

This publication resulted from a 1995 PTTGrants award.

P-29. NCPTT Internet Communications Survey Report

Report (5 pp; appendices). Louisiana State University-Office of Community Preservation. 1997

PTTPublications No. 1997-25

This report summarizes a survey of digital communications use by State Historic Preservation Office staff and other preservation professionals.

This project was completed under contract between Louisiana State University and NCPTT.

P-28. Testing the Energy Performance of Wood Windows in a Cold Climate

Thesis (161 pp). University of Vermont (B. James, author). 1997

PTTPublications No. 1997-16

This report compares the thermal efficiencies of window rehabilitations that retain the original wood sash to the thermal efficiencies of several replacement window types.

This study continued work initiated with a 1994 PTTGrants award (see item P-9 below). See item 1 in *NCPTT Notes* 28 for other publications that resulted from this project.

P-27. Plasma extraction and AMS 14C dating of rock paintings

Reprint from *Techne* (number 5, pp 61-70). M. Hyman and M.W. Rowe, authors. 1997

PTTPublications No. 1997-14

The authors describe a promising technique for dating rock paintings using plasma-chemical extraction and accelerator mass spectrometric analysis.

This publication resulted from a 1996 PTTGrants award to Texas A&M University. See items P-44 above and P-26 below for other PTTPublications on this topic, and see item 58 in *NCPTT Notes 28* for other publications that resulted from this project.

P-26. Rock Art Image in Fern Cave, Lava Beds National Monument, California

Reprint from *Antiquity* (volume 71, number 273, pp 715-720). R.A. Armitage, M. Hyman, J. Southon and M.W. Rowe, authors. 1997

PTTPublications No. 1997-13

A supernova that first appeared in 1054 was chronicled in five contemporary sources. For more than 40 years, researchers have proposed that rock paintings in the western US document the 1054 supernova. The authors tested the attribution of paintings via a plasma-chemical extraction technique. The article describes the technique and the authors' findings that the images studied probably were created several centuries after the 1054 supernova.

This publication resulted from a 1996 PTTGrants award to Texas A&M University. See items P-44 and P-27 above for other PTTPublications on this topic, and see item 58 in *NCPTT Notes 28* for other publications that resulted from this project.

P-25. Performance-Based Approaches to Protecting Our Heritage

Report (21 pp; appendices). Fire Safety Institute. 1997

PTTPublications No. 1997-12

The authors reviewed existing fire codes and standards, and concluded that historic buildings are in almost all cases inadequately protected from loss by fire. The authors advocate a performance-based fire safety evaluation system that balances effective protective measures with avoiding building modifications that damage historic integrity.

This publication resulted from a 1996 PTTGrants award. See items P-35 above and P-22 below for other PTTPublications on this topic, and see item 56 in *NCPTT Notes 28* for other publications that resulted from this project.

P-24. Computerizing Arizona's Cultural Resource Files

Report (22 pp; appendices). Arizona State Museum. 1997

PTTPublications No. 1997-11

This report summarizes activities of the AZSITE consortium during initial stages of a multi-year project to build a centralized computer database for Arizona's historical and archeological site files.

This publication resulted from a 1996 PTTGrants award. See page 8 in *NCPTT Notes 26* for a review of the project.

P-23. Getting It out of the Attic: A Creole Preservation Guide

Report (22 pp; illustrated). St. Augustine Historical Society. 1997

PTTPublications No. 1997-10

This report summarizes the results of the St. Augustine Historical Society's survey of Creole cultural resources in institutions such as archival repositories, libraries and museums, and in private collections throughout the US.

This publication resulted from a 1996 PTTGrants award.

P-22. Analysis of the NFPA Fire Safety Evaluation System for Business Occupancies

Reprint from *Fire Technology* (volume 33, number 3, pp 276-282).

J.M. Watts, Jr., author. 1997

PTTPublications No. 1997-09

The author examined criteria used by the National Fire Protection Association's Fire Safety Evaluation System for rating new and existing commercial buildings and determined that FSES criteria allow a safety level in existing buildings that is 6 to 10 percent lower than that in new construction.

This publication resulted from a 1996 PTTGrants award to the Fire Safety Institute. See items P-25 and P-35 above for other PTTPublications on this topic, and see item 56 in *NCPTT Notes 28* for other publications that resulted from this project.

P-21. Focus on 2000: A Heritage Education Perspective

Report (52 pp; illustrated). Middle Tennessee State University-Center for Historic Preservation. 1997

PTTPublications No. 1997-08

This report summarizes a comprehensive review of heritage education in the US based on a broad survey of State Historic Preservation Offices and heritage organizations.

This project was completed under contract between and the MTSU-Center for Historic Preservation and NCPTT.

P-20. A Manual on Conservation Methodology for Historic Buildings and Structures

Manual (128 pp; illustrated). Caribbean Heritage, Inc. 1997

PTTPublications No. 1997-07

This field manual is designed to assist professionals in the building trades in Puerto Rico, US Virgin Islands and other parts of the Caribbean. Topics addressed include research resources, inspection and documentation, materials analysis, and rehabilitation of historic properties.

This publication resulted from a 1995 PTTGrants award. See page 8 in *NCPTT Notes 25* for a review of the project.

P-19. Research into Protective Coating Systems for Outdoor Bronze Sculpture and Ornamentation

Report (29 pp; illustrated). National Gallery of Art. 1997

PTTPublications No. 1997-03

This report presents initial results from multi-year research on problems associated with using protective coatings for outdoor bronze sculpture and ornamentation. In the study, 29 coatings were tested by exposure to a variety of weathering and environmental conditions. The report includes data on coatings performance and factors to be considered in developing new coatings, and suggestions for further research.

This publication resulted from a 1995 PTTGrants award. See item 26 in *NCPTT Notes 28* for other publications that resulted from this project. See page 4 in *NCPTT Notes 27* for a review of the project.

P-18. A Review of the State of the Art of Laser Cleaning in Conservation

Report (55 pp; illustrated). Los Angeles County Museum of Art. 1997
PTTPublications No. 1997-01

This report examines current uses of laser cleaning in art and artifacts conservation and recent technological advances that have increased the potential for using lasers in conservation. The authors determined that research in laser cleaning methods lags behind laser's potential uses in conservation, and propose establishing a laser conservation laboratory in the US as a center for laser research and education.

This project was completed under contract between LACMA and NCPTT.

P-17. Preservation Education Skills for Building Trades Teachers: Resource Directory Section II

Directory (211 pp; appendices; illustrated). University of Vermont-Historic Preservation Summer Institute. 1996
PTTPublications No. 1996-24

P-16. Preservation Education Skills for Building Trades Teachers: Resource Directory

Directory (485 pp; appendices; illustrated). University of Vermont-Historic Preservation Summer Institute. 1996
PTTPublications No. 1996-23

P-15. Preservation Education Skills for Building Trades Instructors: Project Summary Report

Report (130 pp). University of Vermont-Historic Preservation Program. 1996
PTTPublications No. 1996-22

The report (P-15) explains the methodology, development and implementation of the pilot course, "Preservation Skills for Trades Teachers," held as part of the University of Vermont's 1996 summer institute to encourage the development of a specialization for vocational teachers in graduate preservation programs.

Two supplementary directories (P-16 and 17) are compilations of articles on building conservation, preservation education, preservation philosophy and history, and building conservation, plus the National Park Service's *Preservation Briefs* series.

These publications resulted from a 1995 PTTGrants award to the University of Vermont.

P-14. Evaluation of NAPAP Aerometric Data

Report (13 pp). T.J. Reedy, author. 1996
PTTPublications No. 1996-21

This report presents statistical analysis of aerometric data associated with the National Acid Precipitation Assessment Program briquette studies, including the condition, format and completeness of the data. See item P-47 above for another PTTPublication on this topic.

This project was completed under contract between Terry J. Reedy and NCPTT.

P-13. Survey for State Historic Preservation Offices Regarding Introductory Preservation Education of Local Public Officials

Report (22 pp). B.G. Anderson, author. 1996
PTTPublications No. 1996-13

This report presents the results of a survey of State Historic Preservation Offices on preservation education for officials in local government. Based on the survey data, the report recommends developing regional workshops as effective means of preservation education for community leaders.

This project was completed under contract between Barbara G. Anderson LLC and NCPTT.

P-12. Historic Preservation Training By and For Indian Tribes

Report (31 pp). University of Nevada, Reno and Crow Canyon Archaeological Center. 1996
PTTPublications No. 1996-11

This report is the proceedings of a workshop that considered the training needs of Indian tribes in historic preservation. The report recommends training opportunities for consideration by training providers, including NCPTT.

This publication resulted from a 1995 PTTGrants award to Crow Canyon Archaeological Center.

P-11. Evaluating Sites With Late Nineteenth or Early Twentieth Century Components for Eligibility in the National Register of Historic Places: Using Turn-of-the-Century Whitewares

Report (31 pp; illustrated). Ohio State Historic Preservation Office. 1996
PTTPublications No. 1996-10

This report offers archeologists a tool for establishing historical contexts for sites that include turn-of-the-twentieth-century dinnerware sherds. The authors established a Mean Ceramic Price Index Model for types of dinnerware commonly available during the period, and tested the accuracy of the index by examining sherd assemblages from archeological sites.

This publication resulted from a 1995 PTTGrants award.

P-10. Vertical Gradients of Pollutant Concentrations and Deposition Fluxes at the Cathedral of Learning

Report (9 pp; appendices; illustrated). Carnegie Mellon University. 1996
PTTPublications No. 1996-09

This report summarizes the damaging effects of air pollution on a limestone structure where six decades of pollution have resulted in soiling and stone deterioration. The research sought to determine the principal pollutants responsible for such damage and whether pollutant concentrations vary with the height of the building. See items P-2 below and P-38 above for other PTTPublications on this topic.

This publication resulted from work under a cooperative agreement between Carnegie Mellon University and NCPTT. See item 119 in *NCPTT Notes* 28 for other publications that resulted from this project.

P-9. Testing the Energy Performance of Wood Windows in Cold Climates

Report (85 pp; appendices; illustrated). Vermont State Historic Preservation Office. 1996

PTTPublications No. 1996-08

This report summarizes research undertaken by the Vermont Energy Investment Corporation to determine whether the thermal efficiency of historic windows could be sufficiently improved to match the energy efficiency of replacement windows. See item P-28 above for another PTTPublication on this topic.

This publication resulted from a 1994 PTTGrants award. See item 1 in *NCPTT Notes 28* for other publications that resulted from this project.

P-8. Funding Priorities in Materials Conservation

Report (10 pp; appendices). American Institute for Conservation of Historic and Artistic Works. 1996

PTTPublications No. 1996-07

The preservation community recognizes that establishing research and training priorities is essential to stimulating support for scientific research and to promoting better conservation analytical and treatment techniques. This report summarizes an AIC survey of critical needs for research and training.

This project was completed under contract between AIC and NCPTT.

P-7. Protective Glazing

Report (170 pp; illustrated). Inspired Partnerships. 1996

PTTPublications No. 1996-06

This report summarizes a study of protective glazing for stained glass windows. Findings are presented in four sections: history, architectural impact, energy effects and conservation issues. The report's conclusions question the effectiveness of protective glazing installed for energy conservation.

This publication resulted from a 1994 PTTGrants award. See item 7 in *NCPTT Notes 28* for other publications that resulted from this project.

P-6. Development and Implementation of a Rapid Low-Cost Photogrammetric Data Archival System for Artifact and Osteological Inventory

Report (82 pp; appendices; illustrated). University of Arkansas-Center for Advanced Spatial Technologies. 1996

PTTPublications No. 1996-05

The study investigated the feasibility and current technology for gathering metric data from softcopy three-dimensional images at a reasonable cost. The work demonstrates the potential of photogrammetry and digital processing for archiving images, collecting measurements, analyzing artifacts and distributing information about collections via CD-ROM and the Internet.

This publication resulted from a 1994 PTTGrants award. See item 9 in *NCPTT Notes 28* for other publications that resulted from this project.

P-5. Deterioration and Preservation of Porous Stone

Report (19 pp; appendices; illustrated). Historic Preservation Commission, Monterey, California. 1996

PTTPublications No. 1996-04

This report studies the deterioration of porous sandstone in a marine environment utilizing the Royal Presidio Chapel (circa 1790) at Monterey, California,

as a case study. The report presents data compiled during investigations, strategies for stabilizing and preserving sandstone, and suggestions for further research.

This publication resulted from a 1994 PTTGrants award.

P-4. Origin of the Whewellite-rich Rock Crust in the Lower Pecos Region of Southwest Texas and its Significance to Paleoclimate Reconstructions

Reprint from *Quaternary Research* 46 (pp 27-36). J. Russ, R.L. Palma, D.H. Loyd, T.W. Boutton and M.A. Coy, authors. 1996

PTTPublications No. 1996-03

Research indicates that dry limestone rock shelters in the Lower Pecos region of Texas were an ideal niche for the desert lichen *Aspicilia calcarea* which, during dry periods produces a calcium oxalate — whewellite — residue that can be radiocarbon-dated to establish when the lichen flourished. Based on 14 radiocarbon ages of whewellite and the ubiquity of whewellite crusts, the authors propose a reconstruction technique may be a valuable and widely applicable method for paleoclimate analysis.

This publication resulted from a 1995 PTTGrants award to Newberry College. See item 21 in *NCPTT Notes 28* for other publications that resulted from this project.

P-3. Readings in Site Discovery and Site Evaluation

Report (196 pp). Society for American Archaeology. 1995

PTTPublications No. 1995-14

This compilation of readings was assembled for workshops on site discovery and site evaluation during SAA's 1995 annual meeting. Articles on archeological survey design, sampling and remote sensing methods are included.

This publication resulted from a 1994 PTTGrants award.

P-2. Influence of Atmospheric Pollutants on Soiling of a Limestone Building Surface

Report (352 pp). Carnegie Mellon University. 1995

PTTPublications No. 1995-06

This report describes a project to document the soiling patterns and characterize the conditions that led to the soiling of the Cathedral of Learning in Pittsburgh, Pennsylvania. The overall goals of this project are to better understand why and how soiling occurs and to develop models that link soiling to pollution types and concentrations. See items P-10 and P-38 above for other PTTPublications on this topic.

This project was completed under cooperative agreement between Carnegie-Mellon University and NCPTT. See item 119 in *NCPTT Notes 28* for other publications that resulted from this project.

P-1. Arizona Archaeological Council's Native Americans and Archaeology Workshop

Proceedings (41 pp). Arizona Archaeological Council. 1994

PTTPublications No. 1994-02

These proceedings document a 1994 workshop on the topics of consultation, oral tradition and archeology, and Native American roles in archeology.

This publication resulted from a 1994 PTTGrants award.

PTTPublications

Video Resources

V-10. The Root of the Problem - Conservation of the Hominid Footprints at Laetoli, Tanzania

Video. NPS/NCPTT. 1998

PTTPublications No. 1998-33

This video documents a lecture by Dr. Neville Agnew of The Getty Conservation Institute, and NCPTT advisory board member, on the conservation of the Laetoli hominid footprint trail. The conservation strategy for the site is explained in this visual tour of the six-year project.

V-9. Glass and Stained Glass Conservation

Video. Nebraska State Historical Society. 1998

PTTPublications No. 1998-28

This video features a slide lecture by Mary Clerkin Higgins at the Glass and Stained Glass Conservation Workshop conducted by the Gerald R. Ford Conservation Center of the Nebraska State Historical Society. See item P-46 above for the workshop notebook.

This video resulted from a 1997 PTTGrants award. See page 1 in *NCPTT Notes 29* for a review of the workshop.

V-8. Landscapes and Lives: Preserving the Stories and the Place

Video. NPS/NCPTT. 1997

PTTPublications No. 1997-27

This video documents a lecture by Suzanne Turner, associate dean of the College of Design at Louisiana State University, and author of *The Gardens of Louisiana* (Baton Rouge: LSU Press, 1997). Three Louisiana cultural landscapes illustrate responses to place and the meaning of cultural landscapes.

V-7. The Best of Both Worlds - Lead Hazard Reduction in Historic Buildings

Video. Maryland State Historic Preservation Office. 1997

PTTPublications No. 1997-15

This video examines methods for reducing or eliminating lead paint in historic buildings without adversely affecting their historic character. Among the topics discussed are proper methods for testing and removal, and strategies for conserving architectural details coated with lead paint.

This video resulted from a 1995 PTTGrants award.

V-6. The Application of Advanced Computer Simulation and Visualization Technology to Enhance Cultural Resources Documentation

Video. National Preservation Institute. 1997

PTTPublications No. 1997-06

This video explores potential uses of computer modeling and simulation programs for documenting cultural resources. Advanced Marine Enterprises, Inc. selected the USS Monitor as the subject of a virtual reconstruction. The project demonstrates the potential of simulation technologies to supplement conventional documentation and interpretation, particularly for cultural resources with mechanical systems and moving components.

This video resulted from a 1995 PTTGrants award.

V-5. Historic Preservation/The Next Step

Video. NPS/NCPTT. 1996

PTTPublications No. 1996-12

This video documents a lecture by Dr. James Marston Fitch. Dr. Fitch's remarks include the presentation of a short paper entitled "The Battle for the Past: Preservation versus Historicism, Postmodernism, and the Theme Park," a reflection on the authentic versus the facsimile as one of the principal dialectics of the American preservation movement.

V-4. Connections: Preserving America's Landscape Legacy

Video. American Society of Landscape Architects and The Garden Conservancy. 1996

PTTPublications No. 1996-02

Produced by ASLA, The Garden Conservancy and the National Park Service, this video examines the role of historic landscapes in our nation's cultural heritage. The video demonstrates the irreplaceable value of parks, gardens, battlefields and cemeteries, and explores our deep ties to such places.

This video resulted from a 1994 PTTGrants award to American Society of Landscape Architects.

V-3. Walls of Stone: How to Build Drystone Walls and Rock Fences

Video. Kentucky Heritage Council. 1996

PTTPublications No. 1996-01

This instructional video examines fundamental principals, tools and techniques of dry-stone masonry and provides a step-by-step guide to the repair and construction of dry-stone walls.

This video resulted from a 1996 PTTGrants award.

V-2. Why Preserve?

Video. NPS/NCPTT. 1995

PTTPublications No. 1995-07

This video documents a lecture by Dr. James K. Huhta, director of the Center for Historic Preservation at Middle Tennessee State University, member of the Advisory Council for Historic Preservation, and NCPTT advisory board member. Dr. Huhta's remarks focus on the central role played by historic preservation in American culture and the increasing importance of heritage education.

V-1. Culture Shock: Fire Protection for Historic and Cultural Property

Video. Boston University. 1995

PTTPublications No. 1995-01

This video examines the vulnerability of historic buildings to fire and provides general descriptions of how fire protection systems and detection devices work. Extensive footage of structures with properly installed systems demonstrates that suppression systems need not adversely affect historic buildings.

This video resulted from a 1995 PTTGrants award.

PTTPublications

NCPTT Newsletters

N-30. NCPTT Notes

March 1999 (number 30)

PTTPublications No. 1999-07

This edition focuses on information management, with articles on *Internet Archaeology*, digital publishing and online *Conserve O Grams*. Other articles include a report on evaluating historic masonry with the pendulum hammer; a report on digital videographic imaging; and a report on the NPS's online tutorial, *Electronic Rehab*. Library and web resource reviews include *Historic Resource Surveys and the Internet* (Web site <www.arch.uh.edu/survey>, Houston, Texas: University of Houston-Center for Historic Architecture, 1999), *Saving Our Architectural Heritage: The Conservation of Historic Stone Structures* (Baer, Norbert S. and Rolf Snethlage (ed.), West Sussex (UK): John Wiley and Sons, Ltd., 1997), and the *Adobe Architecture Conservation Handbook* (Contreras, Francisco Uvina (ed.), Santa Fe, New Mexico: Cornerstones Community Partnerships, 1998).

N-29. NCPTT Notes

February 1999 (number 29)

PTTPublications No. 1999-01

This edition focuses on training, with articles on traditional workshop training (conserving three-dimensional and stained glass) and the use of new technology in preservation training (distance learning course via CD on mechanical systems). Other articles include a report on preservation resources on the Internet, a report on The Getty Information Institute's conference on the role of culture in the information society and the role of information management in culture, a report on The Brookings Institution's seminar on economic impacts of historic preservation, and a book review (N.S. Baer, S. Fitz and R. Livingston, *Conservation of Historic Brick Structures*, Shaftesbury (UK): Donhead Publishing Ltd, 1998).

N-28. NCPTT Notes

Fall Supplement 1998 (number 28)

PTTPublications No. 1998-27

This edition summarizes PTTProjects and PTTGrants supported in fiscal years 1994-1998.

N-27. NCPTT Notes

October 1998 (number 27)

PTTPublications No. 1998-26

This edition focuses on NCPTT's materials research program, with an article on four bronze corrosion and outdoor pollution projects. Other articles include a report on the University of Victoria's symposium on professional development needs for the preservation training community, an installment in the information management series on preservation-related databases featuring the National Register Information System, and an article on electronic marker systems as a tool for protecting archeological sites.

N-26. NCPTT Notes

August 1998 (number 26)

PTTPublications No. 1998-19

This edition focuses on research with articles on historic landscapes preservation and research and a report on ground-penetrating radar's new developments in data and image processing techniques. Other articles include a report on the innovative creation of a high school for the preservation arts, an article on the UN/ECE workshop on the effects of air pollution on materials, a report on the development of a statewide database of Arizona's archeological and historic site data, and two book reviews (*Historic Lighthouse Preservation Handbook*, Washington: National Park Service, 1997, and M. Fram, *Well-Preserved*, Erin (Ontario): The Boston Mills Press, 1992).

N-25. NCPTT Notes

June 1998 (number 25)

PTTPublications No. 1998-14

This edition focuses on information management, with articles on an online database of state historic preservation legislation, a report on digital preservation of cultural heritage information, and an article on sustainability and historic preservation featuring web resources. Other articles include an article on models for parking and pedestrian access in downtown historic districts, a report about a symposium on the conservation and preservation of tabby, and a review of the award-winning conservation manual for historic architecture in the Caribbean.

N-24. NCPTT Notes

Spring Supplement 1998 (number 24)

PTTPublications No. 1998-07

This edition reviews NCPTT's PTTPublications, including digital, print and video resources, from 1994 through 1998.

N-1 through N-23. NCPTT Notes (numbers 1 – 23)

PTTPublications Nos. 1993-01, 1994-01, 1995-08 through 13, 1996-14 through 20, 1997-17 through 22, 1998-02 and 03

These NCPTT newsletters from July 1993 through February 1998 are abstracted in *NCPTT Notes* 24, items 40 – 62.

NCPTT Vacancy

Our Mission

United States Department of the Interior

The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and to honor our trust responsibilities to tribes.

National Park Service

The National Park Service preserves unimpaired the natural and cultural resources and values of the National Park System for the enjoyment, education and inspiration of this and future generations. The Service cooperates with partners to extend the benefits of natural and cultural resource conservation and outdoor recreation throughout this country and the world.

National Center for Preservation Technology and Training

The National Center for Preservation Technology and Training promotes and enhances the preservation of prehistoric and historic resources in the United States for present and future generations through the advancement and dissemination of preservation technology and training.

NCPTT, created by Congress, is an interdisciplinary effort by the National Park Service to advance the art, craft and science of historic preservation in the fields of archeology, historic architecture, historic landscapes, objects and materials conservation, and interpretation. NCPTT serves public and private practitioners through research, education and information management.

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